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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/626,224	07/24/2003	William O. Camp JR.	9314-45	4546

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EXAMINER

YUN, EUGENE

ART UNIT	PAPER NUMBER
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2618

DATE MAILED: 07/05/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 10/626,224	Applicant(s) CAMP, WILLIAM O.	
	Examiner Eugene Yun	Art Unit 2618	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-25 is/are pending in the application.
 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-25 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 24 July 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. ____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. ____. |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date ____. | 6) <input type="checkbox"/> Other: ____. |

DETAILED ACTION

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this

Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

2. Claims 1-11 and 13-23 are rejected under 35 U.S.C. 102(b) as being anticipated by Rasmusson (WO 00/74350).

Referring to Claim 1, Rasmusson teaches A wireless terminal, comprising;
a short-range communication module that is configured to communicate first information over a short-range wireless interface with a communication device (see communication between 201 and 203 in fig. 2);

a cellular transceiver that is configured to communicate second information with a cellular network according to a cellular communication protocol (see 225 and 227 of fig. 2);

a processor that is configured to encode the second information for transmission by the cellular transceiver according to a signal processing operation, and is configured to selectively encode the first information for communication by the short-range communication module using the signal processing operation based on whether the communication device supports an enhanced communication mode (see pg. 15, lines 11-32).

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Referring to Claim 3, Rasmusson teaches a wireless terminal, comprising:
a Bluetooth module that is configured to communicate first information with a remote Bluetooth device (see communication between 201 and 203 in fig. 2 and pg. 14, line 30 to pg. 15, line 10); and

a processor that is configured to selectively encode the first information for communication by the Bluetooth module based on whether the remote Bluetooth device supports an enhanced communication mode (see pg. 15, lines 11-32).

Referring to Claim 15, Rasmusson teaches a method of operating a wireless terminal, comprising:

determining whether a remote Bluetooth device supports an enhanced communication mode (see pg. 14, line 30 to pg. 15, line 10);

selectively encoding first information for communication to the remote Bluetooth device based on whether the remote Bluetooth device supports an enhanced communication mode, and communicating the first information to the remote Bluetooth device (see pg. 15, lines 11-32).

Referring to Claim 2, Rasmusson also teaches the short-range communication module is configured to communicate the first information according to a Bluetooth communication protocol (see pg. 14, line 30 to pg. 15, line 10).

Referring to Claims 4 and 16, Rasmusson also teaches a cellular transceiver that is configured to communicate second information with a cellular network according to a cellular communication protocol, and wherein the processor is configured to encode the second information for transmission by the

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cellular transceiver according to a signal processing operation, and wherein the processor is configured to selectively encode the first information according to the signal processing operation for transmission by the Bluetooth module based on whether the remote Bluetooth device supports an enhanced communication mode (see pg. 15, lines 11-32).

Referring to Claims 5 and 17, Rasmusson also teaches a voice encoder, and wherein the voice encoder codes the second information for transmission by the cellular transceiver and selectively encodes, based on whether the remote Bluetooth device supports an enhanced communication mode, the first information for transmission by the Bluetooth module (see pg. 16, lines 27-30).

Referring to Claims 6 and 18, Rasmusson also teaches voice information, and wherein the signal processing operation compresses the voice information (see pg. 16, line 27 to pg. 17, line 6).

Referring to Claims 7 and 19, Rasmusson also teaches the first information comprising audio information, and wherein the signal processing operation cancels echo in the audio information (see pg. 17, lines 28-31).

Referring to Claims 8 and 20, Rasmusson also teaches the first information comprising audio information, and wherein the signal processing operation reduces noise in the audio information (see pg. 16, lines 27-30).

Referring to Claims 9 and 21, Rasmusson also teaches the signal processing operation convolutionally coding the first information (see pg. 17, lines 3-6).

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Referring to Claims 10 and 22, Rasmusson also teaches the signal processing operation interleaves the first information over time (see pg. 5, lines 5-21).

Referring to Claims 11 and 23, Rasmusson also teaches the processor is configured to selectively embed control data in the first information based on whether the remote Bluetooth device supports an enhanced communication mode (see pg. 15, lines 11-32).

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 12-14, 24, and 25 are rejected under 35 U.S.C. 103(a) as being unpatentable over Rasmusson in view of Kim (US 2002/0065045).

Referring to Claims 12 and 24, Rasmusson does not teach the remote Bluetooth device comprising a cordless telephone base station that is configured to be connected to a public switched telephone network (PSTN) 60 (fig. 2), and wherein the processor is configured to communicate through the Bluetooth module with the cordless telephone base station. Kim teaches the remote Bluetooth device comprising a cordless telephone base station that is configured to be connected to a public switched telephone network (PSTN), and wherein the

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processor is configured to communicate through the Bluetooth module with the cordless telephone base station (see paragraph [0023]). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to provide the teachings of Kim to said device of Rasmusson in order to better enhance the quality of short range communications.

Referring to Claims 13 and 25, Rasmusson also teaches the processor is configured to selectively embed control data in the first information based on whether the remote Bluetooth device supports an enhanced communication mode, and wherein the control data comprises a command for the cordless telephone base station (see pg. 15, lines 11-32).

Referring to Claim 14, Kim also teaches the control data instructs the cordless telephone base station to terminate a call on the PSTN (see paragraph [0023]).


Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Eugene Yun whose telephone number is (571) 272-7860. The examiner can normally be reached on 9:00am-6:00pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Matthew D. Anderson can be reached on (571)272-4177. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.



Eugene Yun
Examiner
Art Unit 2618

EY



Matthew D. Anderson
Supervisory Patent Examiner